

In the “Trusted Health Ecosystems” project we are creating a concept and a product vision for a national health platform of the future. This text is part of the overall concept which is published at www.trusted-health-ecosystems.org.

Health literacy and infodemics

Making healthy decisions requires access to accurate information. Health literacy involves a range of skills that enable us to effectively navigate this information in our daily lives. In an era where information is abundant, and digital platforms offer seemingly unlimited access to knowledge, many people find it challenging to sift through the overwhelming volume of information they are confronted with. When coupled with the rapid spread of false or misleading information online, this creates a perilous situation that is already posing significant challenges to our healthcare systems.

The concept of health literacy refers to a broad set of skills that includes everything from being able to locate relevant information to understanding, evaluating and applying new knowledge in practical situations. It extends beyond the ability to simply understand health-related terms and concepts; it encompasses problem-solving abilities, communication skills and proficiency in using information technologies. It includes being able to adeptly manage personal data and to evaluate and categorize information from digital sources while also knowing how to identify and counter disinformation.

Health literacy “... entails people’s knowledge, motivation and competences to access, understand, appraise and apply health information in order to make judgments and take decisions in everyday life concerning healthcare.”

Kristine Sørensen (2012)

Studies like the European Health Literacy Population Survey (HLS19), conducted in 2021 across 17 European countries, offer insights into the state of health literacy in modern populations. This survey shows that nearly half of the respondents reported experiencing significant difficulties in handling health information. According to the survey's respondents, assessing the credibility and quality of information prove to be particularly challenging. Furthermore, approximately 40% of respondents across all surveyed countries struggled to use information provided through the media in making decisions about disease prevention. In Germany, where this figure is nearly 61%, we also see a lower level of health literacy: More than half of the German population – 58.8% – shows a low level of health literacy.

Serious consequences

Difficulties in managing health information affect not only individual health, they also have far-reaching consequences for the healthcare system as a whole. Low health literacy is often associated with unhealthy behaviors and a significantly increased utilization of healthcare services, particularly hospitalization, emergency care and physician visits. Individuals with low health literacy struggle to comprehend medication instructions, accurately assess information about illnesses or conditions, make informed choices about treatment options, and efficiently navigate the healthcare system. They are less likely to engage in preventive measures and experience higher illness and premature morbidity rates.

From an infodemic to an info-apocalypse

While digital technologies can serve to facilitate improved information management, the empirical evidence regarding health literacy takes on new significance in the era of digital transformation. Information overload in the digital age has itself become a health risk, as the proliferation of misleading and contradictory information leads to growing uncertainty. While online, people are encountering bots and convincingly deceptive video manipulations that blur the line between fiction and reality. In this context, technology researcher and IT consultant Aviv Ovadya paints a bleak picture of an “info-apocalypse,” wherein modern technologies are utterly destroying the foundation of truth and trust.

The echo chambers of social networks have already given rise to the emergence of insular communities where false and misleading information can rapidly go viral. The World Health Organization (WHO) has coined the term “infodemic” to describe this phenomenon, which not only encompasses the rapid spread of misinformation but also underscores the health risks associated with disinformation.

“Digital health is undeniably the present and future of our healthcare systems. We must therefore ensure that there are no winners or losers, but rather that everyone benefits and no one is left behind.”

Dr. Hans Henry P. Kluge, WHO Regional Director for Europe (2023)

A cross-national study conducted by the WHO for the European region in 2023 reveals that, despite many countries making significant strides in developing technical infrastructures, only half of them have implemented strategies to enhance digital health literacy. This situation heightens the risk of unequal health opportunities driven by a deepening digital divide in society.

Building resilience against disinformation

High levels of health literacy empower individuals to not only recognize but also properly contextualize false or misleading information. Health literacy can thus be a critical cornerstone in fortifying resilience and resistance against disinformation, ultimately mitigating health risks within the population. It is a key factor in achieving an effective digital transformation of healthcare. We must therefore act now to carry out strategies that promote health literacy. This involves doing more than strengthening individuals' skills and improving the resources available to the public. To improve the situation for individuals with low health literacy, we need a user-friendly healthcare system that reduces demands and facilitates effective information management.

This means we need to create user-friendly digital applications and information resources that deliver genuine benefits. These resources should not only cater to individual learning contexts, needs and preferences but also offer effective quality assurance mechanisms. Ultimately, we need to establish digital platforms that patients can safely navigate, and which ensure robust data privacy and the highest standard of data security. Patients should be able to access curated information on these platforms that empowers them to become active participants in their treatment and make informed decisions about their health.

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